

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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Inventors M. Josephsen et al.
Group Art Unit..... 3628
Examiner Akiba Robinson Boyce
Attorney's Docket No. 100201919-1
Title: Method and Apparatus To Account For Hard Copy Costs

APPEAL BRIEF

1. REAL PARTY IN INTEREST.

The real party in interest is Hewlett-Packard Development Company, LP, a limited partnership established under the laws of the State of Texas and having a principal place of business at 20555 S.H. 249 Houston, TX 77070, U.S.A. (hereinafter "HPDC"). HPDC is a Texas limited partnership and is a wholly-owned affiliate of Hewlett-Packard Company, a Delaware Corporation, headquartered in Palo Alto, CA. The general or managing partner of HPDC is HPQ Holding, LLC.

2. RELATED APPEALS AND INTERFERENCES.

There are no other appeals or interferences known to Appellants, Appellants' legal representative or the Assignee which will affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

3. STATUS OF CLAIMS.

Claims 1, 4-17, 24, 26-29 and 31 are pending. Claims 2, 3, 18-23, 25 and 30 have been canceled. The rejection of Claims 1, 4-17, 24, 26-29 and 31 is appealed.

4. STATUS OF AMENDMENTS.

No amendments were filed after the final action.

5. SUMMARY OF CLAIMED SUBJECT MATTER.

The following is provided pursuant to Rule 41.37(c)(1)(v) which requires "a concise explanation of the subject matter defined in each of the independent claims involved in the appeal, which shall refer to the specification by page and line number, and to the drawings if any, by reference characters." Despite the requirement of a "concise explanation", and with due respect, the Appellants have set forth below both a concise explanation as well as a listing of claim elements in a genuine effort to satisfy the different interpretations of, and requirements under, Rule 41.37(c)(1)(v) assigned by various personnel at the Office. Nothing in this Section 5 should be construed to limit the scope of any of the claims, which are enumerated in full in Appendix I to this Appeal Brief.

Independent Claim 1. Claim 1 is directed to a method of accounting for printing to a single sheet of media that includes determining an amount of pigment used on the single sheet and calculating the cost of printing to the media by adding a cost of the sheet and a cost of the pigment used on the sheet (e.g., blocks 412 and 414 in Fig. 4 and Specification page 10, lines 25-28).

One example of the method of Claim 1 is illustrated in Fig. 4 and described in the Specification at page 10, lines 22-32. The method of Claim 1 includes:

recording a type of media actually used (e.g., block 410 in Fig. 4 and Specification page 10, lines 23-25);

determining an amount of pigment used on the single sheet of media (e.g., block 412 in Fig. 4 and Specification page 10, lines 25-26);

determining an amortized cost related to the printing device per sheet of media and/or related to an operation of the printing device (e.g., block 416 in Fig. 4 and Specification page 10, lines 28-30); and

calculating the cost of printing to the media by adding a cost of the single sheet of media actually used and a cost of the pigment used on the single sheet of media and an amortized cost related to the printing device per sheet of media and/or related to an operation of the printing device (e.g., blocks 414 and 418 in Fig. 4 and Specification page 10, lines 26-31).

Independent Claim 5. Claim 5 is directed to a method of accounting costs for use of a printing device that includes determining an amount of pigment used on each of the sheets actually used by an entity, calculating the cost of the sheets and the pigment, and allocating those costs to the entity (e.g., blocks 510, 516 and 518 in Fig. 5 and Specification page 11, lines 1-7).

One example of the method of Claim 5 is illustrated in Fig. 5 and described in the Specification at page 11, lines 1-10. The method of Claim 5 includes:

identifying an entity to which the costs will be allocated (e.g., block 510 in Fig. 5 and Specification page 11, lines 2-4);

recording a type of media actually used for the entity (e.g., block 512 in Fig. 5 and Specification page 11, line 4);

recording a number of sheets of the type of media actually used for the entity (e.g., block 514 in Fig. 5 and Specification page 11, lines 4-5);

determining an amount of pigment used on each of the sheets of media (e.g., block 516 in Fig. 5 and Specification page 11, lines 5-6);

calculating a cost of the media actually used and a cost of the pigment used on all the sheets of media used for the entity (e.g., block 518 in Fig. 5 and Specification page 11, lines 6-7); and

allocating the cost of the media actually used and the cost of the pigment used to the entity (e.g., block 520 in Fig. 5 and Specification page 10, lines 15-18 and page 11, lines 7-9).

Independent Claim 24. Claim 24 is directed to a computer usable medium that includes instructions for determining the number of dots in a pane of a page of a print job, multiplying the number of dots in the pane by an average pigment cost per dot to determine the cost of the pigment associated with the pane of the page, and adding an amortized cost of the printing device on a per operation basis to the cost of the pigment and the cost of the media. Implementation of embodiment functionality in a computer usable medium is described generally in the Specification at page 3, lines 22-31 and at page 13, lines 16-29 with reference to Fig. 10. One example of the functionality of Claim 24 noted above for determining pigment cost may be found in blocks 710 and 712 in Fig. 7 and in the Specification at page 11, line 32 through page 12, line 5.

One example of the functionality of Claim 24 is illustrated in Fig. 7 (for determining pigment cost) and Fig. 4 and described in the Specification at page 11, line 24 through page 12, line 12 and at page 10, lines 22-32. The computer program product of Claim 24 comprises a computer usable medium having a set of instructions for causing the computer to:

- determine a number of dots in a first pane of a page of a print job (e.g., block 710 in Fig. 7 and Specification page 11, lines 32-33);

- multiply the number of dots in the first pane by an average pigment cost per dot to determine the cost of a pigment associated with the first pane of a page (block 712 in Fig. 7 and Specification page 11, line 33 through page 12, line 2);

- record a type of media actually used (e.g., block 410 in Fig. 4 and Specification page 10, lines 23-25);

- calculate a cost of the pigment used and a cost of the media used (e.g., block 414 in Fig. 4 and Specification page 10, lines 27-29);

- amortize the cost of the printing device on a per operation basis (e.g., block 416 in Fig. 4 and Specification page 10, lines 29-30); and

- add the amortized cost to the cost of the pigment and the cost of the media (e.g., block 418 in Fig. 4 and Specification page 10, lines 30-31).

Independent Claim 26. Claim 26 is directed to a system that includes a data processing system operative to record the actual number of sheets used to execute a print job and the amount of pigment used on each sheet, multiply the actual number of sheets of media used by the cost per sheet of media and adding the cost of pigment for each of the pages to determine a cost associated with the print job, and allocate the cost of the print job to an entity (e.g., controller 242 in Fig. 2 used in conjunction with memory 240 as described generally in the Specification at pages 6-7; and Specification page 9, line 33 through page 10, line 5 describing this functionality for controller 242).

The system of Claim 26 includes:

- a data storage system for storing information regarding a cost per sheet of media associated with the printing device, and a cost of pigment associated with the printing device (e.g., memory 240 in Fig. 2 and Specification page 9, lines 29-32); and

a data processing system coupled to said data storage system and operative to receive a print job and to record an actual number of sheets of media used to execute a print job and to record an amount of pigment used on each sheet of media for execution of the print job, the data processing system multiplying the actual number of sheets of media used by the cost per sheet of media and adding the cost of pigment for each of the pages to determine a cost associated with the print job, the data processing system further operative to allocate the cost of the print job to an entity (e.g., controller 242 in Fig. 2 and Specification page 9, line 33 through page 10, line 5);

wherein allocating the cost of the print job to an entity includes storing a billing code in the data storage system associated with the entity, the data processing system reading a billing code associated with the print job and allocating the cost of the print job to the entity associated with the billing code (e.g., Specification page 10, lines 15-19).

Independent Claim 31. The method for determining the costs associated with a print job in Claim 31 includes, after fulfilling at least a portion of the print job, *the printing device* determining the cost associated with each page *based on the actual pigment used* (e.g., controller 242 in printing device 200 in Fig. 2, Specification page 9, line 33 through page 10, line 5; block 912 in Fig. 9 and Specification page 13, lines 2-5) (emphasis added).

The method of Claim 31 includes:

providing a per page cost of a first media, a per page cost of a second media, a cost of pigment, and a per page amortized cost of a printing device (e.g., block 910 in Fig. 9 and Specification page 12, line 32 through page 13, line 2); and

requesting fulfillment of a print job and, after fulfilling at least a portion of the print job, the printing device determining the cost associated with each page based on the actual pigment used and the use of either the first media or the second media and a per page amortized cost for using the printing device (e.g., block 912 in Fig. 9 and Specification page 13, lines 2-5).

6. GROUNDS OF REJECTION TO BE REVIEWED.

1. Claims 1 and 31 stand rejected under Section 102 as being anticipated by the Fernberg article (What Are The Real Costs Of Copying, *Modern Office Technology*, July 1999).
2. Claim 24 stands rejected under Section 103 as being obvious over Fernberg.
3. Claims 4-13, 15 and 17 stand rejected under Section 103 as being obvious over Fernberg in view of Lacheze 5956698.
4. Claims 26-29 stand rejected under Section 103 as being obvious over Fernberg in view of McLean 20020099456.
5. Claim 14 stands rejected under Section 103 as being obvious over Fernberg in view of Lacheze and McLean.

7. ARGUMENT.

GROUND NO. 1

Claims 1 and 31 stand rejected under Section 102 as being anticipated by the Fernberg article.

A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." MPEP § 2131 (quoting *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987)).

Claim 1 -- Determining Pigment Actually Used On A Single Printed Sheet.

Claim 1 is directed to a method of accounting for printing to a single sheet of media. Claim 1 recites "determining an amount of pigment used on the single sheet...." and "adding a cost of the single sheet of media actually used and a cost of the pigment used on the single sheet of media...."

Fernberg does not teach any kind of print cost accounting that includes determining the amount of pigment actually used on a single printed sheet. On the contrary, Fernberg teaches only that the cost per copy for a copy machine used over

the course of a month may be computed by adding the "operating cost" and the "cost of all expendable supplies" and then "divide the sum by the number of copies per month.... That's your total cost per copy." Fernberg paragraphs 2 and 7.

Applicants acknowledge that Fernberg's "expendable supplies" include "toners", but Fernberg says nothing about determining the amount of toner used on a single sheet. There is simply no indication at all in Fernberg that she does anything other than determine the cost of toner on a monthly basis without regard to the amount of toner used on any individual sheet. Thus, even if it assumed that toner constitutes pigment, Fernberg does not teach every element of the method of Claim 1.

The Examiner argues in reply that these limitations in Claim 1 are met in Fernberg if only one copy per month is printed:

Although it is true that Fernberg computes the cost per copy for a copy machine used over the course of a month, in this case, the total amount of copies per month can always be one copy. Final Office Action, page 17.

Fernberg, however, does not **teach** printing only one copy per month and, accordingly, she does not teach a print cost accounting that includes determining the amount of pigment actually used on a single printed sheet. The Examiner's speculation as to the possibility of printing only one copy per month is irrelevant to the determination of anticipation under Section 102. (Applicants respectfully submit that there is little if any need for a cost accounting system if only one copy per month is printed. Thus, the Examiner's speculation would seem to be unreasonable in any event.)

Claim 31 -- The Printing Device Determining Cost Based On Pigment Used.

The method for determining the costs "associated with a print job" in Claim 31 includes "after fulfilling at least a portion of the print job, the printing device determining the cost associated with each page based on the actual pigment used...."

First, Fernberg does not teach that her copy machine determines the cost of anything, specifically not the cost associated with each page based on the actual pigment used. The Examiner's unexplained assertion to the contrary is not correct.

Second, Fernberg does not teach determining the cost associated with each page in a print job based on the actual pigment used. As detailed above, Fernberg at most teaches only that a per copy cost may be computed based on a total monthly cost

of toner and other "expendable supplies." Fernberg paragraphs 2 and 7. Fernberg does not teach or suggest that her copy machine somehow determines the actual toner used on each page in a print job.

The Examiner does not address the first distinguish feature noted above in the Response to Arguments in the Final Action. In reply to the second distinguishing feature noted above, the Examiner again argues this feature is found in Fernberg if only one copy per month is printed:

Since Fernberg discloses a per copy cost based on total monthly cost of toner and other "expendable supplies.", if only one copy is made during the month period, the cost associated with one page, and therefore each page in a print job based on the actual pigment used is therefore determined, where the toner used represents the pigment used. Final Office Action, page 17.

Fernberg, however, does not **teach** printing only one copy per month and, accordingly, she does not teach determining the cost associated with each page in a print job based on the actual pigment used. The Examiner's speculation as to the possibility of printing only one copy per month is irrelevant to the determination of anticipation under Section 102. (Applicants respectfully submit that there is little if any need for a cost accounting system if only one copy per month is printed. Thus, the Examiner's speculation would seem to be unreasonable in any event.)

GROUND NO. 2

Claim 24 stands rejected under Section 103 as being obvious over Fernberg.

In evaluating the legal question of obviousness, the Examiner must, as a matter of fact, determine the scope and content of the prior art and then ascertain the differences between the claimed subject matter and the prior art. *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966). The Examiner bears the burden of establishing a prima facie case of obviousness based upon the prior art. MPEP 2142.

The computer usable medium of Claim 24 includes instructions for a computer to determine a number of dots in a first pane of a page of a print job and multiply the number of dots in the first pane by an average pigment cost per dot to determine the cost of a pigment associated with the first pane of a page.

In support of the obviousness rejection of Claim 24, the Examiner states at page 4 of the pending Action:

However [Fernberg] does disclose counting dots per inch for determining cost per copy for color costs in Paragraph 16, lines 3-7, which suggests that the number of dots is incorporated into, and effects the determination of the cost of color pigmentation on a copy, thereby making it obvious to multiply the number of dots in each pane by an average pigment cost to determine the cost of a pigment associated with the first pane of a page.

This statement is not correct. The cited paragraph from Fernberg is quoted in full below.

If superb quality is your paramount objective in color copying, the cost per copy will be bearable to you. Your greater concerns will be with sufficient dots per inch (dpi) from the digital scanning device and advanced color discrimination capability to ensure fidelity in color reproduction. If color differentiation is closer to your color copying need, cost-per-copy is important. The key is knowing your objectives. Fernberg, 4th full paragraph on page 32.

This passage from Fernberg does not teach "counting" dots per inch for determining color copy costs, or for any other purpose. This passage suggests only that "superb quality" color copies cost more than lesser quality color copies. Fernberg's acknowledgement that print resolution as measured in dpi may reflect copy quality suggests nothing at all about color panes and pigment costs per dot generally, and specifically not multiplying the number of dots in the first pane by an average pigment cost per dot to determine the cost of the pigment associated with the first pane of a page. Thus, the factual premise upon which the Examiner bases the legal conclusion of obviousness is false. The Examiner, therefore, has failed to establish a prima facie case of obviousness.

In addition, the question of obviousness under Section 103 is not whether each of the differences between the claimed invention and the prior art would themselves have been obvious, but whether the claimed invention as a whole would have been obvious. MPEP § 2141.02(I) (citing *Stratoflex, Inc. v. Aeroquip Corp.*, 713 F.2d 1530, 218 USPQ 871 (Fed. Cir. 1983) and *Schenck v. Nortron Corp.*, 713 F.2d 782, 218 USPQ 698 (Fed. Cir. 1983)). The Supreme Court recognized recently in *KSR* that it is

important to identify a reason the ordinarily skilled artisan would combine or modify elements from the prior art in the manner claimed:

[A] patent composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art. Although common sense directs one to look with care at a patent application that claims as innovation the combination of two known devices according to their established functions, it can be important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does. This is so because inventions in most, if not all, instances rely upon building blocks long since uncovered, and claimed discoveries almost of necessity will be combinations of what, in some sense, is already known. *KSR Int'l Co. v. Teleflex, Inc.* 550 U.S. ___, 127 S. Ct. 1727 (April 30, 2007) (pages 15-16 of the Bench Opinion).

This holding from KSR is reiterated in the Office's Examination Guidelines for Determining Obviousness in View of...KSR as follows:

When considering obviousness of a combination of known elements, the operative question is thus "whether the improvement is more than the predictable use of prior art elements according to their established functions." Federal Register vol. 72, no. 195 October 10, 2007 p. 57527.

The generalized notion that "superb quality" color copies cost more than lesser quality color copies suggests nothing at all about color panes and pigment costs per dot generally, and specifically not multiplying the number of dots in the first pane by an average pigment cost per dot to determine the cost of a pigment associated with the first pane of a page, and then using that determination to calculate the cost of the pigment used as part of an overall print cost accounting scheme. Applicants respectfully submit that there is just no way it can reasonably be concluded that Fernberg makes it obvious to determine printing costs by first determining the number of dots on a page of a print job and then multiplying the number of dots by an average pigment cost per dot to determine the cost of a pigment associated with a page (or a pane of the page).

GROUND NO. 3

Claims 4-13, 15 and 17 stand rejected under Section 103 as being obvious over Fernberg in view of Lacheze 5956698.

Claim 4 Depending From Claim 1.

Claim 4 depends from Claim 1. The rejection of Claim 4 is, apparently, based on the assertion that Fernberg teaches all of the limitations of the base claim -- Lacheze is cited as teaching the further limitation of Claim 4 (allocating the cost of printing to an entity). See, Final Action page 5, paragraph 6. For the reasons detailed above under Ground No. 1, Fernberg does not teach all of the limitations of Claim 1. For these same reasons, therefore, Claim 4 distinguishes patentably over the combination of Fernberg and Lacheze.

Claim 5 -- Determining An Amount Of Pigment Used On Each Sheet.

The cost accounting method of Claim 5 includes "determining an amount of pigment used on *each* of the sheets...." (emphasis added). The Examiner asserts Fernberg paragraph 6 teaches this element of Claim 5. (Lacheze is cited as teaching allocating the cost of printing to an entity). For the reasons detailed above for Claim 1 under Ground No. 1, Fernberg does not teach any kind of print cost accounting that includes determining the amount of pigment actually used on an individual sheet. Fernberg, therefore, does not teach determining the amount of pigment used on each of a plurality of individual sheets. Thus, Claim 5 and its dependent claims distinguish patentably over the combination of Fernberg and Lacheze.

GROUND NO. 4

Claims 26-29 stand rejected under Section 103 as being obvious over Fernberg in view of McLean 20020099456.

The Examiner states at paragraph 7 on page 11 of the Final Action that Claims 26-29 are rejected as being obvious over Fernberg in McLean. However, in the remarks detailing the rejection, reference is made to Lacheze, not McLean. Thus, it appears Claims 26-29 are rejected as being obvious over Fernberg in view of Lacheze, not Fernberg in view of McLean.

The cost allocating system of Claim 26 includes a data processing system "operative to receive a print job and to record an actual number of sheets of media used to execute a print job and to record an amount of pigment used on each sheet of media for execution of the print job...." The Examiner asserts Fernberg paragraph 6 teaches this element of Claim 26. For the reasons detailed above for Claim 1 under Ground No. 1, Fernberg does not teach any kind of print cost accounting that includes determining the amount of pigment actually used on an individual sheet. Fernberg, therefore, does not teach a cost accounting system operative to record an amount of pigment used on each sheet of media for execution of the print job. Thus, Claim 26 and its dependent claims distinguish patentably over the combination of Fernberg and Lacheze.

GROUND NO. 5

Claim 14 stands rejected under Section 103 as being obvious over Fernberg in view of Lacheze and McLean.

Claim 14 depends from Claim 5. Claim 14 adds the further limitation that determining the amount of pigment used comprises:

- determining a number of dots in a first color pane; and
- multiplying the number of dots in the first color pane by an average pigment cost per dot to allocate the cost of a pigment for a first color associated with a page;
- determining the number of dots in a second color pane; and
- multiplying the number of dots in the second color pane by an average pigment cost per dot of a second color to allocate the cost of a pigment for the second color associated with a page.

The rejection of Claim 14 is, apparently, based on the assertion that the base claim is obvious over Fernberg and Lacheze, with McLean cited as teaching first and second color panes. See, Final Action page 15, paragraph 8. For the reasons detailed above under Ground No. 3, the base claim (Claim 5) distinguishes over the combination of Fernberg and Lacheze. For these same reasons, therefore, Claim 14 distinguishes patentably over the combination of Fernberg, Lacheze and McLean.

In addition, as noted above for Claim 24 under Ground No. 2, Fernberg does not teach determining the amount of pigment used by multiplying the number of dots in a

color pane by an average pigment cost per dot. Neither Lacheze nor McLean teach this limitation. For this additional reason, therefore, Claim 14 distinguishes over the cited references.

Respectfully submitted,

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APPENDIX I -- CLAIMS INVOLVED IN THE APPEAL

1. (previously presented) A method of accounting for printing to a single sheet of media in a printing device comprising:

- recording a type of media actually used;
- determining an amount of pigment used on the single sheet of media;
- determining an amortized cost related to the printing device per sheet of media and/or related to an operation of the printing device; and
- calculating the cost of printing to the media by adding a cost of the single sheet of media actually used and a cost of the pigment used on the single sheet of media and an amortized cost related to the printing device per sheet of media and/or related to an operation of the printing device.

2-3. (canceled)

4. (original) The method of accounting for printing to a sheet of media of claim 1 further comprising allocating the cost of printing to the media to an entity.

5. (original) A method of accounting costs for use of a printing device comprising:

- identifying an entity to which the costs will be allocated;
- recording a type of media actually used for the entity;
- recording a number of sheets of the type of media actually used for the entity;
- determining an amount of pigment used on each of the sheets of media;
- calculating a cost of the media actually used and a cost of the pigment used on all the sheets of media used for the entity; and
- allocating the cost of the media actually used and the cost of the pigment used to the entity.

6. (original) The method of claim 5 further comprising storing the entity identification, the type of media, the number of sheets of media of a particular type and the amount of pigment used.

7. (original) The method of claim 5 further comprising storing the entity identification, the type of media, the number of sheets of media of a particular type and the amount of pigment used for each of the number of sheets of media in a print job.

8. (original) The method of claim 5 wherein determining the amount of pigment used further comprises:

determining the number of dots needed to form an image on a sheet; and
multiplying the number of dots on the sheet by an average pigment cost per dot.

9. (original) The method of claim 8 wherein the average pigment cost differs in response to a density of each dot on the sheet.

10. (original) The method of claim 8 wherein the average pigment cost increases in response to an increase in a density of each dot on the sheet.

11. (original) The method of claim 5 wherein determining the amount of pigment used further comprises:

determining the number of dots of a color used to form a color pane, the color panes overlayed with one another to form an image; and
multiplying the number of dots in the color pane by an average pigment cost per dot to allocate the cost of a pigment for a color associated with the image.

12. (original) The method of claim 11 wherein the average pigment cost differs in response to the density of dots on the color pane.

13. (original) The method of claim 11 wherein the average pigment cost increases in response to an increase in density of dots on the color pane.

14. (original) The method of claim 5 wherein determining the amount of pigment used further comprises:

determining a number of dots in a first color pane; and

multiplying the number of dots in the first color pane by an average pigment cost per dot to allocate the cost of a pigment for a first color associated with a page;

determining the number of dots in a second color pane; and

multiplying the number of dots in the second color pane by an average pigment cost per dot of a second color to allocate the cost of a pigment for the second color associated with a page.

15. (original) The method of claim 5 wherein identifying an entity to which the costs will be allocated further comprises entering a billing code associated with the entity.

16. (original) The method of claim 5 wherein identifying an entity to which the costs will be allocated further comprises entering a billing code associated with the entity and a code associated with a print job.

17. (original) The method of claim 5 further comprising adding a cost of amortization of the printing device to the cost of the media and the cost of the pigment.

18-23. (canceled)

24. (previously presented) A computer program product for use with a computer associated with a printing device, the computer program product comprising a computer usable medium having a set of instructions for causing the computer to:

determine a number of dots in a first pane of a page of a print job;

multiply the number of dots in the first pane by an average pigment cost per dot to determine the cost of a pigment associated with the first pane of a page;

record a type of media actually used;

calculate a cost of the pigment used and a cost of the media used;
amortize the cost of the printing device on a per operation basis; and
add the amortized cost to the cost of the pigment and the cost of the media.

25. (canceled)

26. (previously presented) A system for allocating costs associated with operation of a printing device comprising:

a data storage system for storing information regarding a cost per sheet of media associated with the printing device, and a cost of pigment associated with the printing device; and

a data processing system coupled to said data storage system and operative to receive a print job and to record an actual number of sheets of media used to execute a print job and to record an amount of pigment used on each sheet of media for execution of the print job, the data processing system multiplying the actual number of sheets of media used by the cost per sheet of media and adding the cost of pigment for each of the pages to determine a cost associated with the print job, the data processing system further operative to allocate the cost of the print job to an entity;

wherein allocating the cost of the print job to an entity includes storing a billing code in the data storage system associated with the entity, the data processing system reading a billing code associated with the print job and allocating the cost of the print job to the entity associated with the billing code.

27. (original) The system for allocating costs according to claim 26, wherein said data storage system stores the cost of the pigment as a cost per dot of pigment, and wherein the data processing system records a number of dots per page and multiplies the number of dots on a particular page by the cost per dot to determine the cost of pigment per page.

28. (original) The system for allocating costs according to claim 27, wherein the cost of pigment varies as a function of the density of dots on a page varies.

29. (original) The system for allocating costs according to claim 26, wherein the data storage system also stores an amortized cost for wear on the printing device based on the number of sheets of media anticipated to be printed over the life of the printing device, the amortized cost on a per sheet of media basis, the data processing system adding the amortized cost per sheet of media to the cost of the sheets of media and the cost of the pigment.

30. (canceled)

31. (previously presented) A method for determining the costs associated with a print job comprising:

providing a per page cost of a first media, a per page cost of a second media, a cost of pigment, and a per page amortized cost of a printing device; and

requesting fulfillment of a print job and, after fulfilling at least a portion of the print job, the printing device determining the cost associated with each page based on the actual pigment used and the use of either the first media or the second media and a per page amortized cost for using the printing device.

APPENDIX II -- EVIDENCE SUBMITTED UNDER RULES 130, 131 OR 132

none

APPENDIX III -- RELATED PROCEEDINGS

none